EDUC767: Alignment Chart for Machines Maintenance System (MMS) Project

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Problem Identification:

Currently ABC Company relies on contacting an outside consultant to supply important vent and/or vacuum block measurements to potential customers for future die cast products. (It sometimes takes over a week to receive the measurement calculations back from the consultant.). Mechanical engineers at ABC Company just recently were given access to and trained on how to use the new EZ Block Sizer web-based software application. This application allows mechanical engineers (and/or sales employees) to enter specific information into the application and create an inquiry and block sizing request for proposal (RFP) for vent and/or vacuum blocks for a potential die cast customer.

The EZ Block Sizer software application accurately calculates the evacuation area and size of a device used to evacuate a die casting cavity used in the high pressure die casting process. The software application utilizes a series of casting and machine attributes to perform calculations providing a result that is used in selecting the block size. Some of the machine's attributes (manufacturer's specifications) are selected when creating a new inquiry (RFP) and block sizing in the EZ Block Sizer software application. To accurately generate the block sizing results in the EZ Block Sizer software application, the machine attributes need to be updated periodically in the MMS (database). The MMS administrator(s) will be responsible for keeping the machines attributes and specifications up-to-date in the in the MMS to ensure accurate calculations are then generated in the EZ Block Sizer software application.

Target Audience:

The target audience for the MMS training is the die cast mechanical engineers (Machines Maintenance administrators) at ABC Company who provide recommendations to their customers and businesses regarding the use of vent and/or vacuum blocks in the manufacture of their specific products using the EZ Block Sizer software application. Currently there are two mechanical engineers in one location. Additional learner characteristics include:

- Ages: 41 – 50
- Gender: 100% men
- Education: Post-secondary
- Work Experience: 2 years with current company, 5 to 10 years in engineering and 2 years in die casting industry
- Familiar with the EZ Block Sizer software application
- Familiar with computers and technology
- Familiar with die cast terminology

Delivery Options:

The instructions for how to access and update the MMS training will be delivered via an e-Learning module that can be accessed via the Internet. Because the MMS may only need to be accessed periodically, due to new machine updates, the eLearning course can be accessed as often as needed as a refresher course by the MMS administrator(s). The instructions will include a screencast, assessment questions and resources.

Alignment Chart for MMS

Terminal Objective 01: The Machines Maintenance administrator(s) will access and sign in to the MMS via a computer.				
Enabling Objectives	**Assessment Idea**	**Absorb Activity**	**Do Activity**	**Connect Activity**
Given the URL and ID/password credentials, the Machines Maintenance administrator(s) will access and sign in to the MMS.	**Hands-on Activity**	Watch an online guided tour (screencast with narration) on how to access and navigate the MMS.	**Hands-on Activity:** The learner performs a simulated hands-on activity of signing in to the MMS.	Job aid showing where the data in the MMS is utilized by the EZ Block Sizer software application.

Terminal Objective 02: The Machines Maintenance administrator(s) will create and save a new machine in the MMS.				
Enabling Objectives	**Assessment Idea**	**Absorb Activity**	**Do Activity**	**Connect Activity**
Given a manufacturer's machine specification sheet, the Machines Maintenance administrator(s) will enter the correct machine specifications to create and save a new machine in the MMS.	**Multiple Choice/Pick Questions (2 to 3 questions)** **Performance Question(s)**	Watch software demonstration (screencast with narration) which also includes reviewing different types of manufacturer's specification sheets.	**Multiple Choice/Pick Questions** The learner picks the required fields (picks 5 from the list of 10). Learner can practice this activity multiple times. **Matching Drop-down List** The learner selects the matching value associated with a field in the MMS.	Online glossary or samples of spec sheets with highlighted attributes used in the MMS.

Alignment Chart for MMS

Terminal Objective 03: The Machines Maintenance administrator(s) will edit and save the update to a machine in the MMS.				
Enabling Objectives	**Assessment Idea**	**Absorb Activity**	**Do Activity**	**Connect Activity**
Given a manufacturer's machine specification sheet, the Machines Maintenance administrator(s) will edit the machine specifications and update a machine in the MMS.	**True/False**	Watch software demonstration (screencast with narration).	**True/False** The learner determines if the machine information listed in the T/F question is an editable field in the MMS.	

Terminal Objective 04: The Machines Maintenance administrator(s) will delete a machine from the MMS.				
Enabling Objectives	**Assessment Idea**	**Absorb Activity**	**Do Activity**	**Connect Activity**
The Machines Maintenance administrator(s) will delete a machine from the MMS (same as TO).	**Performance Question**	Watch software demonstration (screencast with narration).	**Performance Question** The learner performs the steps to delete a machine from the MMS.	